

Subject name	Physics
Subject code	TPH (General subject)
Additional Subject fee	Nil
Prerequisites	Minimum C Science, Maths and English.

Course Overview

Physics provides opportunities for students to engage with the classical and modern understandings of the universe. This can include topics as varied as thermodynamics, electricity and nuclear processes, motion, waves, and gravitational and electromagnetic fields. In future study, students are also introduced to modern physics theories and models that, despite being counterintuitive, are fundamental to our understanding of many common observable phenomena.

Studying this subject will enable students to:

- develop an appreciation of the wonder of physics and the significant contribution physics has made to contemporary society
- develop an understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action
- experience learning opportunities and experiences within Physics at a greater depth and breadth than those available in the core Junior Science course.
- develop a sound knowledge base in Physics on which to build on in future.
- develop the study skills and processes necessary to apply knowledge in Physics.
- have an opportunity to refine their skills through practical activities
- make an informed subject choice for Year 11 and 12.

Course Outline

The topics covered in the program will be different from those covered in the core Year 10 Science course.

The course introduces aspects of the senior general Physics curriculum, which can include:

- Thermal, nuclear and electrical physics
- Linear motion and waves
- Gravity and electromagnetism
- Revolutions in modern Physics

Assessment

Assessment within Physics uses techniques modelled on those used in Year 11 and 12. This includes a Data Test, Research Investigation, and/or a Student Experiment. Overall, the assessment program will require students to take more responsibility for their own plans and actions in line with the Senior School.

Career Opportunities

Studying Physics can establish a basis for further education and employment in the fields of science, engineering, medicine and technology.

Note: This option is separate from the Rural Operations, Chemistry, Biology or Science in Practice subject options. While these options complement each other, they each act as stand-alone units as well. Students may, and are, encouraged to select up to three of the science based subject options.